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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,443	08/26/2003	Robert J. Higgins	CM06374J	5767

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EXAMINER	
MILORD, MARCEAU	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/649,443	HIGGINS ET AL.	
	Examiner	Art Unit	
	Marceau Milord	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ylijurva (US Patent No 6140970).

Regarding claims 1-2, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), the antenna (22 of fig. 2) including at least one single wire memory device programmed with antenna parameters (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15).

Regarding claim 3, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), wherein the at least one single memory wire device can be manipulated by the portable communication device (col. 3, lines 13-43; col. 5, lines 1-41).

Regarding claim 4, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), wherein the at least one single wire memory device manipulates operation of the portable communication device (col. 3, lines 13-43; col. 5, lines 1-41).

Regarding claim 5, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), wherein the at least one single wire memory device comprises a 1-wire device (col. 6, lines 1-24).

Regarding claim 6, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), wherein the at least one single wire memory device comprises an EEPROM (col. 6, lines 5-15).

Regarding claim 7, Na et al discloses an antenna for a portable communication device (figs. 2 and 4), further comprising a single coaxial connector and the at least one single wire device being electrically coupled thereto (col. 6, lines 16-39).

Regarding claim 8, Na et al discloses an antenna (figs. 2 and 4), comprising: a single wire memory device programmed with antenna parameters (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15); and a single coaxial antenna connector, the single coaxial connector enabling both RF transport and single wire bus communications (col. 5, lines 18-33).

Regarding claim 9, Na et al discloses a radio and antenna interface system (figs. 2 and 4), comprising: a radio including radio electronic circuitry for duplexing RF and baseband signals; an antenna including antenna electronic circuitry for duplexing RF and baseband signals; a coaxial interface coupling the radio and the antenna, the coaxial interface providing a transport for both the RF and baseband signals; and a memory device embedded in the antenna and coupled to the coaxial interface (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15).

Regarding claim 10, Na et al discloses a radio and antenna interface system (figs. 2 and 4), wherein the memory device is a single wire memory device (col. 6, lines 5-15).

Regarding claim 11, Na et al discloses a radio and antenna interface system (figs. 2 and 4), comprising at the radio: a radio coaxial center conductor capacitively coupled to pass RF signals while blocking baseband signals; and the radio coaxial center conductor also being DC coupled through an RF blocking inductor to pass baseband signals; at the antenna: an antenna coaxial center conductor for coupling to the radio coaxial center conductor; a radiator element coupled to the antenna coaxial center for passing RF signals; and an inductor coupled to the antenna coaxial center for blocking RF signals and passing baseband signals to and from the memory device (col. 5, lines 9-64).

Regarding claim 12, Na et al discloses an antenna, comprising: an antenna center conductor: and a single wire memory device electrically coupled to the antenna center conductor (col. 3, lines 13-43; col. 5, lines 1-41; col. 6, lines 5-15).

Regarding claim 13, Na et al discloses an antenna, wherein the antenna center conductor transports both RF and baseband signals (col. 5, lines 4-30).

Regarding claim 14, Na et al discloses an antenna, wherein the single wire memory device comprises an EEPROM (col. 6, lines 5-15).

Regarding claim 15, Na et al discloses an antenna interface system (figs. 2 and 4), comprising: an antenna center conductor; a single wire memory device electrically coupled to the antenna center conductor; and a radio center conductor for coupling to the antenna center conductor (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15).

Regarding claim 16, Na et al discloses an antenna interface system (figs. 2 and 4), wherein the single wire memory device provides at least one of antenna model number, manufacturer ID, predetermined compatible radio models, minimum and maximum frequencies

of operation, impedance level, power level as a function of frequency, radiating efficiency as a function of frequency, model parameters for impedance change in proximity to human body, and electronic control specifications as well as other parameters (col. 6, lines 16-59).

Regarding claim 17, Na et al discloses an antenna interface system (figs. 2 and 4), wherein the single wire memory device provides impedance versus frequency parameters, the radio automatically impedance matching to the antenna impedance as the radio changes frequency without having to measure the impedance of the antenna (col. 5, line 34- col. 6, line 15).

Regarding claim 18, Na et al discloses an antenna interface system (figs. 2 and 4), wherein the single wire memory device provides efficiency as a function of frequency parameters and the radio utilizes these parameters for leveling the radio's effective rated power over a frequency range (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15).

Regarding claim 19, Na et al discloses an antenna interface system (figs. 2 and 4), further comprising additional devices within the antenna for controlling predetermined antenna parameters.

Regarding claim 20, Na et al discloses an antenna interface system (figs. 2 and 4), wherein the additional devices include a parallel output single wire I/O device (col. 6, lines 36-59).

Regarding claim 21, Na et al discloses an antenna interface system (figs. 2 and 4), wherein the parallel output single wire I/O device opens and closes switch contacts to alter the operating frequency of the antenna (col. 5, line 34- col. 6, line 15).

Regarding claim 22, Na et al discloses an antenna (figs. 2 and 4), comprising: an antenna center conductor; and at least one single wire bus device electrically coupled to the antenna center conductor to dynamically control operating parameters of the antenna (col. 5, line 34- col. 6, line 15).

Regarding claim 23, Na et al discloses an antenna (figs. 2 and 4), wherein the at least one single wire bus device dynamically alters the frequency of operation of the antenna (col. 5,lines 1-50).

Regarding claim 24, Na et al discloses an antenna for coupling to a portable communication device (figs. 2 and 4), the antenna comprising a memory device for storing antenna parameters, the radio determining whether a correct antenna has been coupled thereto based on the antenna parameters (col. 3, lines 13-43; col. 5,lines 1-41; col. 6, lines 5-15), and the radio providing an error message when an incorrect antenna has been coupled thereto (col 5, line 44- col. 6, line 15).

Regarding claim 25, Na et al discloses an antenna for coupling to a portable communication device (figs. 2 and 4), wherein the memory device comprises a single wire memory device (col. 6, lines 1-24).

Regarding claim 26, Na et al discloses an antenna for coupling to a portable communication device (figs. 2 and 4), wherein the radio automatically adjusts radio operations in response to the stored antenna parameters (col. 5, lines 1-41; col. 6, lines 5-15).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARCEAU MILORD

MARCEAU MILORD
PRIMARY EXAMINER

8-2-06

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Primary Examiner
Art Unit 2618